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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,547	01/10/2001	Kenichi Suzuki	450100-02931	9718

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FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

ORTIZ CRIADO, JORGE L

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/757,547	Applicant(s) SUZUKI, KENICHI	
	Examiner Jorge L Ortiz-Criado	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hashimoto U.S. Patent No. 6,335,909 in view of the "Applicant's admitted prior art".

Regarding claim 1, Hashimoto discloses an optical disc apparatus comprising:

an optical pickup for irradiating a light beam through "a two-focus lens"(see col. 3, lines 19-29; for use in multi-layer disks, hence two or more focus) onto a signal recording surface of an optical disc including the signal recording surface where digital data is recorded to be optically readable, and for detecting reflection light thereof using plural detectors generating at least A,B,C and D detection signals; said two-focus lens being an objective lens having focuses at two positions (See Abstract; col. 2. line 56 to col. 3, line 28; col. 3, line 29 to col. 4, line 37 Fig. 1);

drive control means for driving and controlling the two-focus lens in an optical axis direction of the light beam (See col. 2. line 56 to col. 3, line 28; Fig. 1);

Art Unit: 2655

focus error center value measurement means for measuring a focus error center value detected by the optical pickup (See col. 2, lines 41 to col. 4, line 18)

focus error signal generation means for generating a focus error signal subjected to balance-adjustment based on the reflection light and a variable coefficient K_f , wherein said focus error signal (FE) is generated by the equation $FE = (A+C) - K_f \cdot (B+D)$ (See col. 2, lines 41 to col. 4, line 18; Fig. 1, output of ref#2, signal S1) and

focus balance control means for causing the drive control means to control a focus balance, based on the focus error center value measured by the focus error center value measurement means (See Fig. 1, ref# 6), and

the focus error signal generated by the focus error signal generation means and subjected to the balance adjustment (See col. 2, lines 41 to col. 4, line 18; Fig. 1, output of ref#2, signal s1)

Hashimoto teaches that the focusing method for the servo focusing adjustment is well known in the art, but does not expressly disclose wherein said light beam is focused on said signal recording surface by driving said two-focus lens in a down-search in such a manner that S-shaped fake signals do not occur before S-shaped true signal.

However, this feature is well known in the art as evidenced by "Applicant's admitted prior art", which discloses an optical disc reproducing apparatus having a two-focus lens objective lens, and driving the objective lens by a **so-called down-search**, wherein the objective lens is focused in the optical disc in a direction in which the lens moves apart from a position closer to the optical disc than the focus position. Inherently present in a **down search** is the presence of S-shaped fake signals that do not occur before S-shaped true signal, (See page 3, lines 5-13)

Art Unit: 2655

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to perform a focusing servo adjustment in a **down-search**, because by doing that the signal called S-shaped fake is avoided to be detected before a true S-shaped signal and further providing the focus servo to turn on at the time of the S-shape true signal, as taught by “Applicant’s admitted prior art”

Regarding claims 2 and 7, Hashimoto further discloses focus/tracking bias voltage supply means for supplying the drive control means with a focus/tracking bias voltage; and focus/tracking bias control means for causing the focus/tracking bias voltage supply means to supply the drive control means with the focus/tracking bias voltage, thereby to cause the drive control means to control a focus/tracking bias (See col. 2, lines 41 to col. 4, line 18; Fig. 1, ref# 6,7)

Regarding claims 3 and 8, Hashimoto further discloses wherein the two-focus lens forms two focus positions by one single objective lens, corresponding to a plurality of discs having respectively different disc substrate thicknesses (See Abstract; col. 2, lines 19-39; col. 5, lines 6-37)

Regarding claims 4 and 9, Hashimoto further discloses wherein the focus error center value measurement means measures an error center value with the two-focus lens kept sufficiently distant from a just-focus position (See col. 2, lines 41 to col. 4, line 18)

Art Unit: 2655

Regarding claims 5 and 10, Hashimoto further discloses wherein a plurality of values including an initial value used as a reference are set and stored for the coefficient K_f (See col. 2, lines 41 to col. 4, line 18)

Regarding claim 6, Hashimoto further discloses an optical disc apparatus comprising:
an optical pickup for irradiating a light beam through a two-focus lens onto a signal recording surface of an optical disc including the signal recording surface where digital data is recorded to be optically readable, and for detecting reflection light thereof using plural detectors generating at least E and F detection signals; said two-focus lens being an objective lens having focuses at two positions (See Abstract; col. 2. line 56 to col. 3, line 28; Fig. 1);

drive control means for driving and controlling the two-focus lens in a radial direction of the optical disc (See col. 2. line 56 to col. 3, line 28; Fig. 1);

tracking error center value measurement means for measuring a tracking error center value detected by the optical pickup (See col. 2, lines 41 to col. 4, line 18);

tracking error signal generation means for generating a tracking error signal subjected to balance-adjustment based on the reflection light and a variable coefficient K_t ; wherein said tracking error signal (TE) is generated by the equation, $TE = E - K_t * F$ (See col. 2, lines 41 to col. 4, line 18; Fig. 1, output of ref#4, signal S2), and

tracking balance control means for causing the drive control means to control a tracking balance, based on the tracking error center value measured by the tracking error center value measurement means (See Fig. 1, ref# 6), and

Art Unit: 2655

the tracking error signal generated by the tracking error signal generation means and subjected to the balance adjustment. (See col. 2, lines 41 to col. 4, line 18; Fig. 1, output of ref#4, signal S2)

Hashimoto teaches that the focusing method for the servo focusing adjustment is well known in the art, but does not expressly disclose wherein said light beam is focused on said signal recording surface by driving said two-focus lens in a down-search in such a manner that S-shaped fake signals do not occur before S-shaped true signal.

However, this feature is well known in the art as evidenced by “Applicant’s admitted prior art”, which discloses an optical disc reproducing apparatus having a two-focus lens objective lens, and driving the objective lens by a **so-called down-search**, wherein the objective lens is focused in the optical disc in a direction in which the lens moves apart from a position closer to the optical disc than the focus position. Inherently present in a **down search** is the presence of S-shaped fake signals that do not occur before S-shaped true signal, (See page 3, lines 5-13)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to perform a focusing servo adjustment in a **down-search**, because by doing that the signal called S-shaped fake is avoided to be detected before a true S-shaped signal and further providing the focus servo to turn on at the time of the S-shape true signal, as taught by “Applicant’s admitted prior art”

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2655

- a. U.S. Patent Nos. 5,745,450, 5,912,867 to Miyazono, which teaches that by driving a two-focus lens in a down-search in such a manner, the S-shaped fake signals do not occur before S-shaped true signal.
- b. U.S. Patent no. 5,901,122 to Inoue, which teaches that by driving a two-focus lens in a down-search in such a manner, the S-shaped fake signals do not occur before S-shaped true signal

Response to Arguments

Applicant's arguments filed 3/14/2005 have been fully considered but they are not persuasive.

In regard to claims 1-10, Applicants argues that Hashimoto does not teach (1) "a two-focus lens" and the two-focus lens being an objective lens having focuses at two positions".

(2) Also argues that Applicant's admitted prior art distinguishes from applicant's claimed feature of driving said two-focus lens in a down-search in such a manner that S-shaped fake signals do not occur before S-shaped true signal.

The Examiner cannot concur because:

(1) Hashimoto teaches an objective lens which is automatically adjusted and focused at different positions, depending of the layer to be recorded/reproduced.

Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read

Art Unit: 2655

into the claim. > E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily).< In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)

(2) The examiner cannot find how the language of the claims patentably distinguishes from the Applicant's admitted prior art, which clearly and specifically states if an optical disc is reproduced with the use of an optical disc reproducing apparatus comprising a two-focus lens as claimed, a signal called an **S-shape fake signal is generated before a S-shaped true signal** for detecting switching-on of the focus servo because of existence of two-foci. And, **"in order to avoid this, a so-called down-search is carried out** in which the objective lens is focused on the optical disc in a direction in which the lens moves apart from a position closer to the optical disc than the focus position, **as a result by performing the so called down-search the S-shape fake signal is inherently not generated before a S-shaped true signal.**

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action

Art Unit: 2655

after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DAVID L. OMETZ
PRIMARY EXAMINER